

BIDMC Outpatient Parenteral Antibiotic Therapy (OPAT) Program: Process Improvement Study

The Problem

The BIDMC OPAT program is dedicated to providing longitudinal care for patients requiring prolonged intravenous antimicrobial therapy in the outpatient setting. A continued increase in patient volume has strained the resources of our service and prompted our study of process improvement.

- Our program received 302 requests for patient enrollment from 7/1/13 to 12/31/13.
- Our current major problems recognized are: 1.) enrollment is requested by email communication 2.) patient tracking is performed using an excel spreadsheet, leading to significant time spent on updating and managing this list.
- We sought to study our time spent on the tasks involved in our program to identify ways to enhance the efficiency and timeliness of our patient care.

Aim/Goal

- To perform a time study on the OPAT clinic staff assessing the time spent on the standard tasks of enrollment, monitoring and medication adjustment.
- To develop and implement IT support for patient enrollment, lab monitoring and clinic visit tracking, eliminating the need for an excel spreadsheet.
- To study a change in available time dedicated to direct patient care, lab review and management of abnormal lab results.

The Team

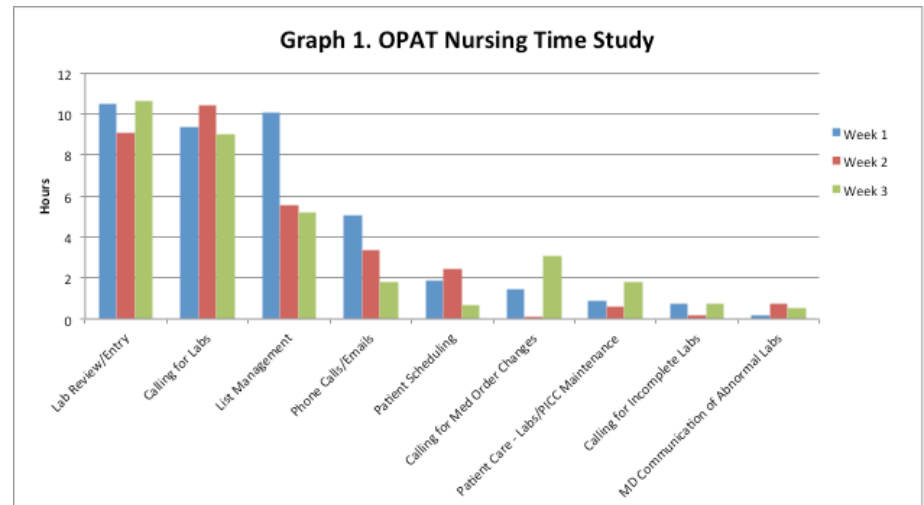
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The Interventions

- The Medical Director shadowed each member of the team to outline the current processes.
- Worksheets were created by the group, outlining each task of the program with start and stop times to document duration of time spent on each task.
- Three weeks (11/11-11/15, 11/18-11/22, 1/6-1/10) of data were collected by the OPAT clinic staff.
- Request placed for IT programming to create an OPAT Program order field in OMR to allow for the creation of a census and enhanced patient tracking.

The Results/Progress to Date

Baseline time study data is presented in Graph 1. Data demonstrates 6-10 hours/week spent on the review of lab results and result entry into OMR. Approximately 8-10 hours/week are spent on calling to request lab work. 5-10 hours/week are spent on managing our current excel spreadsheet.



Lessons Learned

Our staff spends a significant amount of time each week calling for labs and entering the results for physician review. We expect to significantly decrease the time required managing our excel spreadsheet with IT support. However, we will need to pursue further intervention regarding outreach to referring physicians, home infusion companies and rehab facilities to impact the time spent calling for lab results.

Next Steps/What Should Happen Next

- Repeat our time study post intervention after implementation of IT support for census management
- Meet with representatives of our frequently used home infusion companies and rehab facilities to standardize the day of lab draw and result communication to our program
- Consider enhanced ID input on medication/lab orders at the time of discharge

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